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Original via UPS -- Copy via Electronic Mail

October 19, 2016

Mr. William K. Honker, Director
Water Quality Protection Division (6WQ)
U. S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Revoke and Reissue State Certification for the Small Municipal Separate Storm Sewer System (sMS4) General Storm Water Permit – NMR040000

Dear Mr. Honker:

In order to provide clear and consistent permit language across all Municipal Separate Storm Sewer System Permits in New Mexico, NMED finds it necessary to revoke the previous CWA Section 401 Certification of the proposed National Pollutant Discharge Elimination System (NPDES) permit:

Small Municipal Separate Storm Sewer (sMS4) General Permit – NMR040000

In NMED's original certification, it reserved the right to amend or revoke the certification if such action is necessary to ensure compliance with the State's water quality standards and water quality management plan. As such, a revised and reissued 401 State Certification, omitting the previous Condition #3, is included with this package. Based on conversations with our sister state agencies, language included as Condition #3 in the original certification is not necessary to ensure compliance with state water quantity law and may instead lead to incorrect and burdensome interpretations of state water quantity law. The proposed permit language on green infrastructure implementation is sufficient to comply with New Mexico State law and the applicable portions of the Clean Water Act.

If any, comments and conditions are enclosed on separate sheets.

The U.S. Environmental Protection Agency (USEPA) proposes to regulate discharges under the above-referenced NPDES Individual Permit. A state Water Quality Certification is required by the federal Clean Water Act (CWA) §401 to ensure that the action is consistent with state law (New Mexico Water Quality Act, New Mexico Statutes Annotated (NMSA) 1978, §§ 74-6-1 to -17,) and complies with state Water Quality Standards [*State of New Mexico, Standards for Interstate & Intrastate Surface Waters, New Mexico Water Quality Control Commission, 20.6.4 New Mexico Administrative Code (NMAC)*], the Water Quality Management Plan/Continuing Planning Process, including Total Maximum Daily Loads (TMDLs), and the Antidegradation Policy.

Pursuant to State regulations for permit certification (20.6.2.2001 NMAC), USEPA jointly with NMED issued a public notice of the draft permit and announced a public comment period posted on the NMED web site

www.nmenv.state.nm.us/swqb/WQA/Notice on March 27, 2015. The public comment period ended on December 18, 2015. NMED received comments from the Interstate Stream Commission, which were considered in this certification.

Sincerely,

Shelly Lemon

Shelly Lemon, Acting Chief
Surface Water Quality Bureau

cc: (w/enclosures)

Ms. Diane Smith, USEPA (6WQ-NP) via e-mail
Mr. Brent Larsen, USEPA (6WQ-PP) via e-mail
Robert Mayes, City Manager, City of Farmington, 800 Municipal Drive, Farmington, NM 87401
Kim Carpenter, County Executive Officer, San Juan County, 100 South Oliver Drive, Aztec, NM 87410
Joshua Ray, City Manager, City of Aztec, 201 W. Chaco St., Aztec, NM 87410
Miguel Gabaldon, P.E., NMDOT District 5 Engineer, Box 4127, Coronado Santa Fe, NM 87502-4127
Mark Duncan, Mayor, Village of Kirtland, 31 RD 6299, Kirtland, NM 87417
Brian Snyder, City Manager, City of Santa Fe, PO Box 909, Santa Fe, NM 87504-0909
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Jay Ruybalid, City Manager, City of Belen, 100 S. Main St., Belen, NM 87002
Charles Griego, Mayor, Village of Los Lunas, PO Box 1209, Los Lunas, NM 87031
Robert Knowlton, Mayor, Village of Bosque Farms, PO Box 660, Peralta, NM 87042
Danny Monette, County Manager, Valencia County, PO Box 1119, Los Lunas, NM 87031
Kenneth Murphy, P.E., NMDOT District 3 Engineer, PO Box 91750, Albuquerque, NM 87109
Mayor Bryan Olguin, Village of Peralta, 90-A Molina Rd., Peralta, NM 87042
Nora L. Barraza, Mayor, Town of Mesilla, 2231 Avenida de Mesilla, Mesilla, NM 88046
Garrey Carruthers, President, New Mexico State University, President's Office, MSC 3Z, PO Box 30001, Las Cruces, NM 88003-8001
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Russell Begaye, President, Navajo Nation, PO Box 9000, Window Rock, AZ, 86515
Leroy Arquero, Governor, Cochiti Pueblo, PO Box 70, Cochiti Pueblo, NM 87072
Daniel Coriz, Governor, Santo Domingo Pueblo, PO Box 99, Santo Domingo Pueblo, NM 87052
Milton Herrera, Governor, Pueblo of Tesuque, Route 42, Box 360-T, Santa Fe, NM 87506

Mr. Ron Curry, Regional Administrator
Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202-2733

October 19, 2016

STATE CERTIFICATION

RE: Small Municipal Separate Storm Sewer System (sMS4) General Storm Water Permit – NMR040000

Dear Mr. Curry:

The New Mexico Environment Department has examined the proposed NPDES permit above. The following conditions are necessary to assure compliance with the applicable provisions of the Clean Water Act Sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law.

Compliance with the terms and conditions of the permit and this certification will provide reasonable assurance that the permitted activities will be conducted in a manner which will not violate applicable water quality standards and the water quality management plan and will be in compliance with the antidegradation policy.

The State of New Mexico

( ) certifies that the discharge will comply with the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the Clean Water Act and with appropriate requirements of State law

(x) certifies that the discharge will comply with the applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the Clean Water Act and with appropriate requirements of State law upon inclusion of the following conditions in the permit (see attachments)

( ) denies certification for the reasons stated in the attachment

( ) waives its right to certify

In order to meet the requirements of State law, including water quality standards and appropriate basin plan as may be amended by the water quality management plan, each of the conditions cited in the draft permit and the State certification shall not be made less stringent.

The Department reserves the right to amend or revoke this certification if such action is necessary to ensure compliance with the State's water quality standards and water quality management plan.

Please contact Sarah Holcomb at (505) 827-2798, if you have any questions concerning this certification.

Comments and conditions pertaining to this draft permit are attached.

Sincerely,

Shelly Lemon

Shelly Lemon, Acting Chief
Surface Water Quality Bureau

Small Municipal Separate Storm Sewer System (sMS4) General Storm Water Permit
NPDES No. NMR040000
State Certification of the Proposed NPDES Permit
October 19, 2016

Conditions of Certification

The following revisions are necessary to ensure that discharges allowed under the National Pollutant Discharge Elimination System (NPDES) permit protect State of New Mexico water quality standards (WQS) adopted in accordance with §303 of the Clean Water Act (CWA) and the New Mexico Water Quality Act [NMSA 1978, §§ 74-6-1 to -17]. State of New Mexico (State) WQS are published in the document entitled Standards for Interstate and Intrastate Surface Waters, New Mexico Water Quality Control Commission (WQCC), 20.6.4 New Mexico Administrative Code (NMAC) as amended by the WQCC and approved by the United States Environmental Protection Agency (EPA or USEPA) as of June 5, 2013.

NPDES regulations at 40 CFR 122.44(d)(1)(i) require that permit *[l]imitations must control all pollutants or pollutant parameters...which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard...*

NPDES regulations at 40 CFR 124.53(e)(2) require:
When the State certifies a draft permit instead of a permit application, any conditions more stringent than those in the draft permit which the State finds necessary to meet the requirement listed in paragraph (e)(l) of this section. For each more stringent condition, the certifying State agency shall cite the CWA or State law references upon which that condition is based.

The following conditional certification includes references to Procedures for Implementing NPDES Permits in New Mexico or "NMIP." State of New Mexico, Statewide Water Quality Management Plan and Continuing Planning Process (WQMP), approved by the WQCC on May 10, 2011 and USEPA on December 23, 2011 states, among other things, *"as the current NPDES permitting authority for NM, EPA Region 6 develops effluent limitations and schedules of compliance in accordance with its Procedures for Implementing NPDES Permits in New Mexico, which is based on applicable federal regulations and guidance."* The current version of the NMIP prepared by USEPA Region 6 Permits Branch in consultation with the NMED Surface Water Quality Bureau (SWQB) is dated March 15, 2012.

Condition #1:

40 CFR Part 122.21(e)(3) requires:

Except as specified in 122.21(e)(3)(ii), a permit application shall not be considered complete unless all required quantitative data are collected in accordance with sufficiently sensitive analytical methods approved under 40 CFR part 136 a
/or required under 40 CFR chapter I, subchapter N or O.

(i) For the purposes of this requirement, a method approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O is "sufficiently sensitive" when:

(A) The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter; or

(B) The method ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method

detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

(C) The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter.

NOTE TO PARAGRAPH (E)(3)(I): Consistent with 40 CFR part 136, applicants have the option of providing matrix or sample specific minimum levels rather than the published levels. Further, where an applicant can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive", the analytical results are not consistent with the QA/QC specifications for that method, then the Director may determine that the method is not performing adequately and the applicant should select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.21(e)(3)(i). Where no other EPA-approved methods exist, the applicant should select a method consistent with 40 CFR 122.21(e)(3)(ii).

(ii) When there is no analytical method that has been approved under 40 CFR part 136, required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the Director, the applicant may use any suitable method but shall provide a description of the method. When selecting a suitable method, other factors such as a method's precision, accuracy, or resolution, may be considered when assessing the performance of the method.

Any pollutants added to monitoring requirements must be evaluated with methods that have a low enough ML to evaluate compliance with NMED water quality standards. The values provided below reference MDLs reviewed in EPA or Standard Methods. USGS, ASTM or other methods were not reviewed in the information provided below.

Proposed Permit Language

Part IV.Q of the Permit:

The following Minimum Quantification Levels (MQLs) may not be sufficiently sensitive for reporting pollutant data for NPDES permit applications and/or compliance monitoring. Refer to Part II of the permit for requirements.

Chemical	CAS Number	STORET
Total Residual Chlorine	7782-50-5	50060
Cadmium	7440-43-9	01027
Silver	7440-22-4	01077
Thallium	7440-28-0	01059
Cyanide	57-12-5	78248
Dioxin (2,3,7,8-TCDD dioxin)	1764-01-6	34675
4,6-Dinitro-O-Cresol	534-52-1	34657
Pentachlorophenol	87-86-5	39032
Benzidine	92-87-5	39120
Chrysene	218-01-9	34320
Hexachlorobenzene	118-74-1	39700

Chemical	CAS Number	STORET
N-Nitrosodimethylamine	62-75-9	34438
Aldrin	309-00-2	39330
Chlordane	57-74-9	39350
Dieldrin	60-57-1	39380
Heptachlor	76-44-8	39410
Heptachlor epoxide	1024-57-3	39420
Toxaphene	8001-35-2	39400

Part III.A.4.b of the Permit:

Sufficiently Sensitive Methods/Minimum Quantification Levels:

The Permittee shall use sufficiently sensitive EPA-approved analytical procedures or methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O as defined in 40 CFR 136.3, 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv).

The approved analytical method (unless another method or reporting level is required by this permit) must have a minimum level (ML) of quantification at or below the level of the applicable water quality criterion and/or effluent limit. If there is no approved analytical method with a published ML at or below the criterion and/or limit, then the Permittee shall use an approved analytical method with the lowest published ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O.

Current USEPA R6 minimum quantification levels (MQLs) for reporting and compliance are provided in Appendix C. Unless indicated below, if the EPA R6 MQL for a pollutant or parameter is sufficiently sensitive and the analytical test result is less than the MQL, then a value of zero (0) may be used for reporting purposes on DMRs. Unless indicated below, the EPA R6 MQL for a pollutant or parameter is not sufficiently sensitive and the analytical test result is less than a calculated or defined ML from a sufficiently sensitive method, then a value of zero (0) may be used for reporting purposes on DMRs.

For applications and effluent characteristics reports, both MDL, if calculated, and ML shall be submitted. Results below MDL may be reported as zero. For pollutants indicated below, results at or above MDL, but below ML shall be reported as detected and estimated. For all other pollutants, results below ML may be reported as less than (<) quantified value.

The Permittee may develop and submit to USEPA Region 6 NPDES Permits Branch (6WQ-P), with copy to NMED, at the address in Part III, a report for the use of matrix or sample (effluent) specific minimum levels rather than published levels. The submitted report must demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive," the analytical results are not consistent with the QA/QC specifications for that method. The submittal must contain QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated in

accordance with Appendix B to 40 CFR 136 Appendix D. The submittal must also document the calculation for effluent-specific MQL. An effluent specific minimum quantification level (MQL), using a method with no published ML, shall be determined in accordance with the following calculation:

MQL = 3.18 x MDL

Upon written approval by the EPA Region 6 NPDES Permits Branch (6WQ-P), the effluent specific MQL may be utilized by the Permittee for all future Discharge Monitoring Report (DMR) reporting requirements.

Condition #2:

20.6.4.13.H NMAC states:

Surface waters of the state shall be free of pathogens from other than natural causes in sufficient quantity to impair public health or the designated, existing or attainable uses of a surface water of the state.

20.6.4.105 NMAC states:

Rio Grande Basin – The main stem of the Rio Grande from the headwaters of Elephant Butte reservoir upstream to Alameda Bridge (Corrales Bridge), excluding waters on Isleta Pueblo.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, public water supply, wildlife habitat and primary contact.

And, 20.6.4.401, 20.6.4.402, and 20.6.4.403 NMAC state:

(401) San Juan River Basin – The main stem of the San Juan river from the Navajo Nation boundary at the Hogback upstream to its confluence with the Animas river. Some waters in this segment are under the joint jurisdiction of the state and the Navajo Nation.

A. Designated uses: public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal coldwater aquatic life and warmwater aquatic life.

(402) San Juan River Basin – La Plata river from its confluence with the San Juan river upstream to the New Mexico-Colorado line.

A. Designated uses: irrigation, marginal warmwater aquatic life, marginal coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

(403) San Juan River Basin – The Animas river from its confluence with the San Juan river upstream to Estes Arroyo.

A. Designated uses: public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

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The State of New Mexico Statewide Water Quality Management Plan states:

> *If an application for a new or revised permit is received for a discharge into an impaired waterbody with an approved TMDL but with no available WLA, the permit may be issued without revision of the TMDL provided the discharge is at or less than the in-stream TMDL target concentration.*

Background

On September 29, 2006, EPA Region 6 issued a general permit (NMR040000) for discharges from regulated small municipal separate storm sewer systems (sMS4s) in New Mexico. This general permit became effective on July 1, 2007 and authorized discharges of storm water from sMS4s provided that the MS4 was located fully or partially within an urbanized area as determined by the 2000 Census. Coverage under the General Permit requires preparation of a Storm Water Management Plan (SWMP) that includes identification and control of all pollutants associated with urban activities to minimize impacts to water quality and compliance with a SWMP within the terms of the General Permit is generally assumed to be consistent with the TMDL.

An *E. coli* TMDL for the Rio Grande (Rio Puerco to Isleta Pueblo bnd) assessment unit was included in the 2010 Middle Rio Grande TMDL document[1], approved by EPA Region 6 on June 30, 2010. The San Juan Part One TMDL[2] was approved by EPA Region 6 on August 26, 2005 and includes TMDLs for *E.coli* and sedimentation for the La Plata and San Juan Rivers. The San Juan Part Two TMDL[3] was approved by EPA Region 6 on January 17, 2006 and includes TMDLs for total nitrogen and total phosphorus for the Animas River. The Animas River TMDLs[4] were approved by EPA Region 6 on September 30, 2013 and includes TMDLs for *E.coli*, total phosphorus, and temperature. As part of the TMDLs, WLAs were assigned to individual NPDES permittees in the impaired assessment units. In addition, based on the 2010 Census, a WLA for the Farmington UA MS4 was included in the 2013 Animas River TMDLs; however, no explicit WLAs for the Los Lunas or Farmington UAs were included in the 2005, 2006, and 2010 TMDLs because there were no Urbanized Areas identified in these regions at that time.

In contrast, the 2010 U.S. Census population data identified both the Los Lunas Urbanized Area and the Farmington Urbanized Area and coverage is included in the statewide NPDES Storm Water General Permit for sMS4s in New Mexico (NMR040000) to be issued by EPA Region 6. Although specific WLAs were not allocated to either Urbanized Area, according to Section 4.5 and Table 4.13 of the 2010 TMDL, Table 5.13 of the San Juan Part One TMDL, Table 4.13 of the San Juan Part Two TMDL, and Table 4.7 of the 2013 Animas River TMDL, "urbanized high density areas" were identified as probable nonpoint pollutant sources that may be contributing to observed loadings and were assumed to be covered in the Load Allocation.

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[1] https://www.env.nm.gov/swqb/documents/swqbdocs/MAS/TMDLs/MRG/CD-ROM/USEPA-ApprovedMRG_TMDL06-30-10.pdf
[2] https://www.env.nm.gov/swqb/Projects/SanJuan/TMDL1/index.html
[3] https://www.env.nm.gov/swqb/Projects/SanJuan/TMDL2/index.html
[4] https://www.env.nm.gov/swqb/SanJuan/Animas/index.html

SWQB WQMP and EPA Guidance

Section IV(B)(1) of the State of New Mexico Statewide Water Quality Management Plan and Continuing Planning Process (WQMP)[5] allows for a WLA to be calculated for a new permit (e.g., Los Lunas Urbanized Area sMS4) without a revision to the TMDL. The WQMP states, *"If an application for a new or revised permit is received for a discharge into an impaired waterbody with an approved TMDL but with no available WLA, the permit may be issued without revision of the TMDL provided the discharge is at or less than the in-stream TMDL target concentration."*

In addition, the 2014 update[6] of the EPA guidance memo, *"Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs"* addresses the issue of a newly regulated storm water source by stating:

> *If a TMDL had previously included a newly permitted source as part of a single aggregated or gross load allocation for all unregulated storm water sources, or all unregulated sources in a specific category, the NPDES permit authority could identify an appropriate allocation share and include a corresponding limitation specific to the newly permitted storm water source. EPA recommends that any additional analysis used to identify that share and develop the corresponding limit be included in the administrative record for the permit. The permit writer's additional analysis would not change the TMDL, including its overall loading cap.*

According to EPA guidance for storm water TMDL development[7], *"EPA expects TMDL authorities to make separate allocations to NPDES-regulated storm water discharges (in the form of WLAs) and unregulated storm water (in the form of LAs)."* Although The 2010 TMDL does not explicitly discuss the potential for a storm water permit for the Los Lunas Urbanized Area, the Pollutant Source Summary in Table 4.13 does identify high density, urbanized areas as nonpoint pollutant sources, which are assumed to be covered in the Load Allocation. Similarly, both the 2005 and 2006 San Juan River watershed TMDLs identify "municipal (urbanized high density areas)" as a probable source. Thus, the previously unregulated storm water from the Los Lunas and Farmington "urbanized high density areas" was implicitly included in the Load Allocation of the TMDLs.

Consistent with EPA Guidance and the SWQB WQMP, the implicit Load Allocation (LA) for "municipal (urbanized high density areas)" can be reassigned as an explicit Wasteload Allocation (WLA) for the Los Lunas Urbanized Area and Farmington Urbanized Area without revision of the TMDLs as long as, *"...the discharge is at or less than the in-stream TMDL target concentration."*[8] Although the TMDLs do not specify a WLA for the Urbanized Areas, it does state that coverage under the General Permit requires preparation of a SWMP that includes identification and control of all pollutants associated with urban activities to minimize impacts to water quality. In this case, compliance with a SWMP within the terms of the General Permit is generally assumed to be consistent with the approved TMDL and will fulfill any obligations they have toward implementing and meeting the TMDL. In other words, compliance with the General Permit will hold the Los Lunas and Farmington sMS4 storm water discharges at or below the in-stream TMDL target concentrations.

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[5] https://www.env.nm.gov/swqb/documents/swqbdocs/WQMP-CPP/WQMP-CPP-December2011.pdf
[6] http://www.epa.gov/npdes/pubs/EPA_SW_TMDL_Memo.pdf
[7] http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/final-wwtmdl.pdf
[8] https://www.env.nm.gov/swqb/documents/swqbdocs/WQMP-CPP/WQMP-CPP-December2011.pdf

Conclusion

Similar to the process discussed in Appendix B of the MRG NPDES General Storm Water Permit (NMR04A000)[9] and Appendix F of the 2010 MRG TMDL[10], a WLA can be assigned to the Los Lunas and Farmington Urbanized Areas based on the existing TMDLs and the jurisdictional area of the Los Lunas and Farmington Urbanized Areas.

Los Lunas UA WLA calculation

The 2010 TMDL includes TMDLs for three flow regimes (high, moist, and dry) in the Rio Grande (Rio Puerco to Isleta Pueblo bnd) assessment unit and the 2010 U.S. Census identifies the total area of the Los Lunas Urbanized Area as 69.26 square miles. The following watershed data were used for the calculation of the Los Lunas UA:

Los Lunas Urbanized Area = 69.26 square miles
Rio Grande (Rio Puerco to Isleta Pueblo bnd) area = 612 square miles
Los Lunas Urbanized Area as percentage of watershed = 69.26/612 = 11%

Using the percent jurisdictional area approach, the portion of the TMDL that should be reassigned as an explicit WLA for the Los Lunas Urbanized Area is as follows:

Rio Grande (Rio Puerco to Isleta Pueblo bnd) assessment unit (NM-2105_40)					
	High	**Moist**	**Mid-range**	**Dry**	**Low**
TMDL	1.20 x 10^13	3.83 x 10^12	n/a	1.85 x 10^11	n/a
Individual NPDES WLAs	1.66 x 10^10	1.66 x 10^10	n/a	1.66 x 10^10	n/a
Los Lunas Urbanized Area*	**9.86 x 10^11**	**2.72 x 10^11**	n/a	**1.75 x 10^10**	n/a
Total Wasteload Allocation	**1.00 x 10^12**	**2.89 x 10^11**	n/a	**3.41 x 10^10**	n/a
Load Allocation	**8.01 x 10^12**	**2.20 x 10^12**	n/a	**1.41 x 10^11**	n/a
Margin of Safety	3.02 x 10^12	1.34 x 10^12	n/a	9.26 x 10^9	n/a

* The Los Lunas Urbanized Area WLA was assigned as a percentage of the load allocation, where LA = TMDL – NPDES WLAs – MOS. Values in **BOLD** are allocations that were updated as a result of the discussion in this memo.

Finally, the loading per area is calculated by (LA+MS4)/total area. For the Los Lunas UA, the loading per area (cfu/sq mi) values are as follows:

Rio Grande (Rio Puerco to Isleta Pueblo bnd) assessment unit (NM-2105_40)					
	High	**Moist**	**Mid-range**	**Dry**	**Low**
Loading per area (cfu/sq mi)	1.47 x 10^10	4.04 x 10^9	n/a	2.60 x 10^8	n/a

[9] https://www.env.nm.gov/swqb/NPDES/Permits/NMR04A000-AlbuquerqueMS4.pdf
[10] https://www.env.nm.gov/swqb/documents/swqbdocs/MAS/TMDLs/MRG/CD-ROM/USEPA-ApprovedMRG_TMDL06-30-10.pdf

Farmington UA WLA calculation

The 2013 Animas River TMDLs[11] included WLAs for the Farmington UA for *E.coli*, temperature, and total phosphorus. **The loading per area values for the Animas River are available in Sections 4.4.1, 5.4.1 and 6.4.1 of the 2013 TMDL.** However, a nutrient TMDL was developed in 2006 for the Animas River (San Juan River to Estes Arroyo) assessment unit that did not include a MS4 WLA. The jurisdictional area percentage (8%) outlined in the 2013 Animas TMDLs can be applied to the allocations in the 2006 nutrient TMDL as outlined in the table below.

The San Juan Part 1 and Part 2 TMDLs (2004 and 2005) include TMDLs for bacteria, sedimentation, nutrients, and selenium. Neither the Gallegos Canyon nor the La Plata River (McDermott Arroyo to Colorado border) assessment units discussed in these TMDLs are within the UA. The 2010 U.S. Census identifies the total area of the Farmington Urbanized Area as 35.12 square miles. The following watershed data were used for the calculation of the Farmington UA:

La Plata River (San Juan River to McDermott Arroyo) area = (0.4%)
- 57.53 total watershed square miles
- 0.25 square miles in UA

San Juan River (Animas River to Cañon Largo) area = (2.7%)
- 388.04 total watershed square miles
- 10.54 square miles in UA

San Juan River (Navajo boundary at Hogback to Animas River) area = (4.4%)
- 270.04 total watershed square miles
- 11.77 square miles in UA

Animas River (San Juan River to Estes Arroyo) area = (8%)
- 275.32 total watershed square miles
- 21.96 square miles in UA

Using the percent jurisdictional area approach, the portion of the TMDL that should be reassigned as an explicit WLA for the Farmington Urbanized Area in each assessment unit is included in the table below. The loading per area is calculated by (LA+MS4)/total area. For the Farmington UA, the loading per area values are also included in the table below:

Assessment Unit	TMDL parameter	Farmington UA MS4[a] WLA	Loading per area
La Plata River (San Juan River to McDermott Arroyo)	sedimentation	Not to exceed 21.5% fine sediment[b]	
	E.coli	1.52 x 10^6 cfu/day	6.62 x 10^6 cfu/sq mi/day
San Juan River (Animas River to Cañon Largo)	sedimentation	Not to exceed 29.5% fine sediment[b]	
	E.coli	1.75 x 10^10 cfu/day	1.67 x 10^9 cfu/sq mi/day

[11] https://www.env.nm.gov/swqb/documents/swqbdocs/MAS/TMDLs/Animas/2013/AnimasTMDL.pdf

Assessment Unit	TMDL parameter	Farmington UA MS4[a] WLA	Loading per area
San Juan River (Navajo boundary at Hogback to Animas River)	*E.coli*	5.85 x 10^10 cfu/day	4.93 x 10^9 cfu/sq mi/day
Animas River (San Juan River to Estes Arroyo)	total nitrogen	3.25 lbs/day	0.57 lbs/sq mi/day
	total phosphorus	1.01 lbs/day	0.075 lbs/sq mi/day

[a] Where the UA is calculated as a percentage (listed above) of the LA described in the respective TMDLs.
[b] SWQB updated the sedimentation assessment protocols in 2011. The statements in the "UA MS4" and "Loading per area" fields in the table (above) are based on the TMDL targets in the 2005 sedimentation TMDLs and do not reflect the updated sedimentation assessment protocols. Instead of including the "% fine sediment" numeric targets from the 2005 TMDLs, **implementation of these TMDLs for purposes of the sMS4 permit for the Farmington UA should include BMPs to reduce sediment and monitoring of turbidity and TSS.**

For MS4s to more readily implement the requirements of the sedimentation TMDLs, monitoring for turbidity must be added to the requirement to monitor discharges for Total Suspended Solids (TSS). Additionally, the MS4s must include a section in the SWMP to specifically address sediment discharges from both construction and industrial sites within their jurisdictions. This section must specifically address the number of construction and industrial inspections conducted by the MS4, any insufficient BMP findings of those inspections where sediment discharges were a major issue, any follow up/corrective actions taken by the MS4 with respect to sediment discharges, and any measures taken by the MS4 (street sweeping, more frequent inspections, ordinances, etc.) to resolve major sediment discharges. The MS4s may elect to conduct an in-stream study to investigate sedimentation issues in the impaired reaches, or may rely on a third party to do so (i.e. watershed groups, contractors, etc.) but this is not an explicit requirement of the TMDL.

Desegregation of the WLA:
In the proposed permit in Part I.C.2.b (i) (c) B, it provides that the permittees are allowed "in consultation with/and the approval of NMED, to determine an alternative sub-measurable goal derived from the WLA for the pollutant(s) of concern for their respective MS4."

NMED recommends the following language be inserted into the permit as guidance for selecting a sub-measureable goal under the aggregate WLA if a permittee decides to comply with the permit individually. We believe our proposed language will provide clarity on TMDL loading calculations and ease of understanding the process of setting alternative goals for the permittees and the public.

"If an individual permittee or a group of permittees seeks an alternative sub-measureable goal NMED will review and approve these requests as part of the SWMP; however NMED requests that preliminary proposals be submitted with the Notice of Intent (NOI) according to the due dates specified in the permit. This proposal shall include, **but is not limited to**, the following items:

I. **Determine base loading for subwatershed areas consistent with TMDL**

a. Using the table below, the permittee must develop a target load consistent with the TMDL for any sampling point in the watershed (even if it includes area outside the jurisdictional area of the permit).

		Flow Regime				
	Pollutant	**high**	**moist**	**mid**	**dry**	**low**
Rio Grande (Los Lunas UA)	E.coli	1.47E+10	4.04E+09	N/A	2.60E+08	N/A
San Juan River (Animas River to Cañon Largo) Farmington UA	sedimentation	Not to exceed 20% fines				
	E. coli	1.67 x 10^9 cfu/sq mi/day				
San Juan River (Navajo boundary at Hogback to Animas River) Farmington UA	E. coli	4.93 x 10^9 cfu/sq mi/day				
Animas River (San Juan River to Estes Arroyo) Farmington UA	Total Nitrogen	1.85 lbs/sq mi/day				
	Total Phosphorus	0.57 lbs/sq mi/day				
La Plata River (San Juan River to McDermott Arroyo) Farmington UA	Sedimentation	Not to exceed 20% fines				
	E. coli	6.62 x 10^6 cfu/sq mi/day				

b. An estimation of the pertinent, subwatershed area that the permittee is responsible for and the basis for determining that area, including the means for excluding any tributary inholdings;

c. Using the total loading for the watershed (from part a) and the percentage of the watershed area that is part of the permittee(s) jurisdiction (part b) to calculate a base WLA for this subwatershed.

II. **Set Alternative subwatershed targets**

a. Permittee(s) may reallocate WLA within and between subwatershed based on factors including:
- Population density within the pertinent watershed area;
- Slope of the waterway;
- Percent impervious surface and how that value was determined;
- Stormwater treatment, installation of green infrastructure for the control or treatment of stormwater and stormwater pollution prevention and education programs within specific watersheds

b. A proposal for an alternative subwatershed target must include the rationale for the factor(s) used

III. **Ensure overall compliance with TMDL WLA allocation**

a. The permitee(s) will provide calculations demonstrating the total WLA under the alternative proposed in (Part II) is consistent with the baseline calculated in (Part I) based on their total jurisdictional area. Permittee(s) will not be allowed to allocate more area within the watershed than is accorded to them under their jurisdictional area. For permittees that work cooperatively, WLA calculations may be combined and used where needed within the sub-watershed amongst the cooperating parties.

WLA calculations must be sent as part of the Notice of Intent, and must be sent to:
Sarah Holcomb
Industrial and Stormwater Team Leader
NMED Surface Water Quality Bureau
P.O. Box 5469,
Santa Fe, NM 87502"

Small Municipal Separate Storm Sewer System (sMS4) General Storm Water Permit
NPDES No. NMR040000
State Certification of the Proposed NPDES Permit
October 19, 2016

Comments that are not Conditions of Certification:

NMED has no new additional comments from what was presented in the original certification.

Comments on Fact Sheet

1. On page 3, Table 1: Los Lunas UA lists NM DOT District 1 (Deming), should be corrected to NMDOT District 3 (Albuquerque).

2. On page 6, under Discharge Goals: EPA states "MS4s expected to be covered under this permit would discharge into waters under jurisdiction of the State of New Mexico." Since the NPDES program in New Mexico is still implemented by EPA, technically the applicability of the program is to Waters of the United States.

3. On page 13, table 2 (NMED Water Quality Standards, Impaired Waters and TMDLs): The designations for the following must be changed:
    a. San Juan River (Navajo boundary at Hogback to Animas River) is a Warmwater Aquatic Life use, not Marginal Warmwater Aquatic Life.
    b. San Juan River (Animas River to Canon Largo) is a Warmwater Aquatic Life use, not Marginal Warmwater Aquatic Life.
    c. Animas River (San Juan River to Estes Arroyo) is a Warmwater Aquatic Life use, not Marginal Warmwater Aquatic Life.
    d. Additionally, there was a Use Attainability Analysis conducted for the segment of the Animas River in 20.6.4.403 and 20.6.4.404 NMAC (Animas River: San Juan River to Estes Arroyo, and Animas River: Estes Arroyo to Southern Ute Tribal boundary) to show that the current coldwater and marginal coldwater uses are not attainable due to naturally high ambient water temperatures. NMED SWQB took this revision to the New Mexico Water Quality Control Commission in October 2015 and is awaiting a final approval on this change.

4. Page 16: EPA states "Discharges from MS4s could also reach various arroyos, agricultural drains, acequias, and irrigation channels flowing through state. Many of these conveyances are listed waters of the State where NMWQS 20.6.4.98 applies and would likely be considered waters of the United States. Even should a particular drain not be a water of the United States, it could still serve as a conduit to a surface water and thus provide a route for MS4 discharges to reach a water of the United States. The applicable New Mexico WQS for drains are set forth in 20.6.4.98. See Table 3: New Mexico Specific Criteria."

    NMED would suggest the following language instead:
    Discharges from MS4s may be to various surface waters and/or tributaries (e.g., arroyos, agricultural drains, acequias, and irrigation channels) before entering waters classified or described in NMWQS. Surface waters of the State and exceptions are defined in 20.6.4.7.S.(5) NMAC. Unclassified surface waters of the State are subject to NMWQS 20.6.4.98 NMAC (unless listed as ephemeral as described in 20.6.4.97 NMAC and 20.6.4.15 NMAC, Subsection C). Unclassified perennial waters would be subject to NMWQS 20.6.4.99 NMAC. Surface waters of

the State that are considered tributaries would be considered waters of the United States. Even should a particular irrigation drain not be a water of the United States, it could still serve as a conduit (conveyance) and thus provide a route for MS4 discharges to reach a water of the United States. Discharges to a water of the State that is not considered a water of the United States may be subject to enforcement in accordance with 20.6.4.12 NMAC.

5. Page 18, Farmington UA Water Quality: Under the San Juan River segment, at the end of the first paragraph, please correct the document date to November 18, 2014.

6. Page 27, Las Cruces Monitoring Data: The source tracking study section is unclear. The discussion begins with an E. coli source tracking study conducted by the City of Las Cruces but then the language goes into discussion of the Farmington area. It appears that the Farmington language should be removed.

7. Page 27: It is unclear where the hardness value came from. (Is this total hardness, or dissolved hardness?) If these data are reflective of Farmington, then it appears that a value closer to 300 mg/L is actually appropriate.

8. In Table 6 on page 27, EPA should also consider NMED's Human Health-Organism Only (HH-OO) standards which are applicable in waterbodies that have an aquatic life use (other than limited aquatic life). Sometimes, these values are more stringent than the values listed for acute and chronic, such as for PCBs. The value listed in the table is the acute criteria (0.014 ug/L) versus the HH-OO criteria (0.00064 ug/L).

9. EPA's data analysis on pages 28-29 isn't entirely clear. It would be clearer if EPA would discuss pollutant issues specific to each UA.
    a. Bacteria: EPA compares some data to NM's secondary contact standard, which is not applicable in most cases (excepting where 20.6.4.97 NMAC applies to ephemeral waters – where an approved Use Attainability Analysis is in place – other intermittent waters (20.6.4.98 NMAC) applies as a default). Please refer to Condition #2 above for the bacteria allocations.

10. It will be difficult for the permittees to measure the Farmington temperature TMDL WLA in joules/m^2/s/day. Discussion below:

    The lower Animas temperature TMDL allocations were based on modeling a target temperature of 25C, the 6T3 for that AU. The 6T3 was targeted because using the max temperature of 29C would not be protective of the 6T3 and was considered a component of the implicit Margin Of Safety (MOS). The model output is for solar radiation and in j/m^2/s/day, which is not practicable to convert into a more permit-friendly unit. The SSTEMP modeling for the AU is in Table 5.3 (below).

Table 5.3 Animas River (San Juan River to Estes Arroyo) - MCWAL

WQS 6T3 (MCWAL)	Model Run Date	Segment Length (miles)	Solar Radiation Component per 24-Hours (+/-)	% Total Shade	Modeled Temperature °C (24 hour)
25°C (77°F)	7/17/2010	16.8	Current Field Condition: +192.90	17.4	Minimum: 15.40 Mean: 20.35 Maximum: 25.31
TEMPERATURE ALLOCATIONS FOR Animas River (San Juan River to Estes Arroyo) [a] 24-HOUR ACHIEVEMENT OF SURFACE CRITERION FOR TEMPERATURE [b] 24-HOUR LOAD ALLOCATION (LA) NEEDED TO ACHIEVE SURFACE CRITERION WITH A 10% MARGIN OF SAFETY Actual reduction in solar radiation necessary to meet surface WQS for temperature: Current Condition –Load Allocation = 192.90 – 107.74 = 85.16 j/m²/s/day			Run 1 +182.16[a] j/m²/s	22	Minimum: 15.28 Mean: 20.14 Maximum: 25.00
			Run 2 +165.34[b] j/m²/s	29.2	Minimum: 15.10 Mean: 19.80 Maximum: 24.50

Table 5.4 Temperature TMDL

Assessment Unit	Aquatic Life Use	NPDES WLA (25%[c]) (j/m²/s/day)	sMS4 WLA (8%[d]) (j/m²/s/day)	LA (j/m²/s/day)	MOS (10%[a]) (j/m²/s/day)	TMDL (j/m²/s/day)
Animas River (San Juan River to Estes Arroyo)	MCWAL[b]	37.2	8.93	102.68	16.53	165.34

Notes: [a] Actual MOS values may be slightly greater than 10% because the final MOS is back calculated after the Total Shade value is increased enough to reduce the modeled solar radiation component to a value less than the target load minus 10%.

[b] TMDL is based on the MCWAL 6T3 temperature of 25°C as an inherent component of the MOS.

[c] NPDES WLA value is 25% of the TMDL value, less the MOS. The derivation of this percentage is discussed in Section 5.4.1.

[d] sMS4 WLA value is 8% of the TMDL value, less the MOS and NPDES WLA. Please see Appendix E for more information on this derivation.

a. For simplicity, NMED recommends that this is implemented in the permit for monitoring purposes as a simple monitoring event matched to the max standard, which is 29 degrees Celsius. Since stormwater discharges are episodic and temporary, NMED believes that this is an appropriate way to implement the TMDL since no guidance was given in the implementation section of that document. Attached in Appendix A is a graph showing that there is an inverse relationship between temperature and flow.

11. Metals: How was the 162 mg/L hardness value calculated (and is this total or dissolved)? Also EPA states that chronic conditions do not apply to stormwater, but what about stormwater discharges during the monsoon season when there is a stormwater discharge multiple days in a row (i.e. every evening there is a rainstorm)? Acute and chronic conditions are discussed at 20.6.4.7(A)(4) and 20.6.4.7(C)(2) NMAC and should be referenced in the permit fact sheet.

12. Page 31, EPA's footnote states that Maricopa County is in New Mexico. Maricopa County is in Arizona.

13. Page 31, the footnotes on Table 7 should be renumbered – number 5 appears to be missing.

14. NMED suggests the following fact sheet language to address allowable non-stormwater discharges.

For potable water sources example, some pollutants have lower aquatic life surface water numeric criteria than drinking water supply maximum contaminant levels or goals (e.g., dissolved arsenic, dissolved cadmium, dissolved copper, total recoverable cyanide, dissolved lead, mercury, dissolved nickel, dissolved thallium, dissolved zinc, benzoapyrene, chlordane, 4,4'-DDT and derivatives, dieldrin, dioxin,

endrin, hexachlorobenzene, PCBs, and toxaphene). Public drinking water system operators would need to be contacted to determine if there are pollutants in the source water that may exceed applicable surface water quality standards.

Groundwater dewatered from shallow aquifers hydro-geologically / hydraulically connected to the surface water streams is likely to have similar pollutant concentrations (not a new water contaminate to the surface waters). Aquifers in developed areas have a potential for being contaminated. Also, groundwater has the potential for high total dissolved solids (salts) that may be toxic to aquatic life. Information on groundwater characteristics, and comparison to surface water quality standards is needed before discharge.

Tracer dyes used in illicit discharge or other studies entering surface water (watercourse) must be used in accordance with manufactures' label instructions in concentrations and at a duration to avoid aquatic toxicity concerns. Controls to limit public contact, wildlife and livestock of waters, including prior public notice that tracer dyes may enter surface water is recommended. Sources of information for dye tracer toxicity include Material or Safety Data Sheets (SDS), State of Michigan acceptable list at http://www.michigan.gov/documents/deq/wb-rule97-dye-acceptablelist_302542_7.pdf; and published toxicity studies).

Operators of sewage collection systems and municipalities need to develop specific corrective action procedures (e.g., solids removal and proper disposal, disinfection, de-chlorination and/or neutralization, etc.) to minimize pollutants from sanitary sewer overflows (SSOs) entering surface water (watercourse).

Reporting of SSOs, or other discharges (spills), must be in accordance with any applicable State of New Mexico Discharge Permit to New Mexico Environment Department (NMED) Groundwater Quality Bureau (GWQB); and/or NPDES permit to USEPA Region 6 and NMED Surface Water Quality Bureau (SWQB). If reporting and corrective action is conducted in accordance with a State of New Mexico DP or NPDES permit, then additional reporting under 20.6.2.1203 NMAC (Notification of Discharge-Removal) is not required.

15. Part IV.C (Consistency with an Applicable TMDL Analysis): Appendix B must be updated based on NMED's Condition #2 above.

16. Part V.A.3 (Where to submit the NOI): Operators may submit their NOI to NMED at either: sarah.holcomb@state.nm.us or via mail:
    Program Manager
    Point Source Regulation Section
    NMED Surface Water Quality Bureau
    PO Box 5469
    Santa Fe, NM 87502

17. Part V.A.5 (Permittees with Cooperative Elements in their SWMP) and Part V.D (Sharing Responsibility for SWMP Implementation): EPA may want to consider expanding on the explanation of what is considered cooperative. For example, in the MRG MS4, EPA has stated

that a cooperative agreement (not necessarily legally binding, which does need to occur later) is enough to be considered cooperative for the purposes of submitting the entity's Notice of Intent. And it may be worthwhile to mention that permittees are not required to cooperate on all elements of the permit. For each measure where there is a cooperative agreement in place, the permittees qualify for the deadline extensions outlined in the final permit. Also, EPA should discuss the legal requirements to be considered a collaborative program (i.e. a legally binding document that clearly describes who is responsible for implementing what portions of the agreement, and backup plans in case one party does not hold up their end of the agreement.)

18. Part V.A.7 (Effective Date of Coverage): EPA may want to consider clarifying language here. It would be worthwhile to explain that permittees covered under the 2007 sMS4 permit are administratively continued under that permit until their NOI under this permit is approved by EPA. Additionally, they must keep implementing their programs under the administratively continued permit until they receive coverage under this permit.

19. Part V.B (SWMP Requirements – Post Construction): EPA should mention in the fact sheet that if a permittee selects a device for infiltration of stormwater that is deeper than it is wide, they must submit a Notice of Intent to the NMED Ground Water Quality Bureau for evaluation of the need for a Class V UIC Injection Well permit. The NOI form is located at https://www.env.nm.gov/gwb/FORMS/NewMexicoEnvironmentDepartment-GroundWaterQualityBureau-Forms.htm and the form should be submitted to Program Manager, Ground Water Pollution Prevention Section, NMED, PO Box 5469, Santa Fe, NM 87502. For questions, permittees may contact Greg Huey at greg.huey@state.nm.us or 505-827-6891.

Comments on the Proposed Permit:

1. On Page 6 of Part I.A.2 (Potentially Eligible MS4s): EPA should also add the Village of Kirtland (Farmington UA) as a potential permittee. The Village incorporated this year and is within the UA as defined in the 2000 and 2010 Censuses.

2. NMED suggests the following language as clarification to the non-stormwater discharge language in Part I.A.4 (Authorized Non-Stormwater Discharges):

The following non-stormwater discharges to surface water (watercourse) are not anticipated to cause or contribute to a violation of water quality standards and/or significant contributors of pollutants or require a Notice of Intent of Discharge to NMED Surface Water Quality Bureau under 20.6.2.1201 NMAC (i.e., not a new water contaminant discharge or alter the character or location of an existing water contaminant discharge) provided permit conditions, best management practices (BMPs) or treatment controls are implemented:

- *Potable (chlorinated) water that is de-chlorinated and/or the chlorine has sufficient time to dissipate before flow into surface water.*
- *Potable water source (public drinking water source) discharge with pollutant concentrations at or less than applicable surface water quality standards in 20.6.4 NMAC.*

- *Groundwater with pollutant concentrations at or less than applicable surface water quality standards 20.6.4 NMAC.*
- *Tracer dyes used in accordance with manufactures' label instructions in concentrations and at a duration to avoid aquatic toxicity concerns.*

Examples of permit conditions, BMPs or treatment include, but are not limited to:

- *Use all practicable turbidity control (e.g., erosion and sediment controls, stabilization, minimize runoff, etc.) techniques prior to flow into surface water;*
- *Use filtration and properly dispose or remove particulates so not re-introduced into surface water from precipitation or runoff;*
- *Use de-chlorination treatment or dissipation controls for chlorinated waters;*
- *Use dewatering practices in EPA 2012 CGP Part 2.1.3.4;*
- *Use dewatering conditions in EPA 2015 MSGP Parts 8.G.4.2.9, 8.H.4.2.9, or 8.J.4.2.9;*
- *Control discharge, such that flow:*
  - *has low velocity to not cause erosion*
  - *avoids areas of exposed soil unless water used to control dust or irrigation;*
  - *avoids areas of soil or water contamination (e.g., solid waste management units, areas of concern, etc.)*
  - *does not continue for more than 4 consecutive days, if pollutant concentrations at or lower than acute aquatic life numeric criteria, but higher than chronic aquatic life numeric criteria.*

3. Page 11 of Part I: electronic NOIs must also be sent to: sarah.holcomb@state.nm.us.

4. Page 15/Part I.C.2.b.ii.a (Discharging a Pollutant of Concern): NMED recommends that the following language be added for clarity (additional language is underlined): "Determine whether the MS4 may be a source of the pollutant(s) of concern by referring to the CWA §303(d) list and then determining if discharges from the MS4 would be likely to contain the pollutant(s) of concern at levels of concern, i.e. above applicable water quality standards for that pollutant. The evaluation of CWA §303(d) list parameters should be carried out based on an analysis of existing water quality data (e.g. Illicit Discharge and Improper Disposal Program) conducted within the permittee's jurisdiction."

5. Page 16/Part I.C.2(b)(iii) – (Table 3, Pre-TMDL Bacteria Program Development and Implementation Schedules): NMED strongly suggests that EPA revise the implementation schedules proposed throughout the permit (not just in this section) to be in accordance with permittees' NOI approvals, not in conjunction with the effective date of the permit. With the large number of permittees anticipated to be seeking coverage under this permit, it is likely that some entities will not have permit coverage when some of these schedules begin to come due. Permittees covered under the administratively continued 2007 sMS4 permit should continue implementing programs started under that permit, and should shift to their new programs and schedules only upon approval of their new NOI. EPA may consider shortening timeframes from

the approval of the new NOI, as permittees will be aware of the requirements and can be working on them while waiting for NOI approval.

6. Page 20/Part I.D.2 (Legal Authority): EPA should clarify that the Farmington UA flows downstream into Navajo Nation tribal waters (and there are approved water quality standards in effect for the Navajo Nation, which must be taken into consideration when monitoring, if more stringent than NMED water quality standards.) EPA should also clarify that the Pueblo of Cochiti, which is downstream of the Santa Fe UA, does not have approved water quality standards. In this case, the Santa Fe UA permittees should consider the pueblo's concerns, if any, in their SWMPs and monitoring efforts.

7. Page 20/Part I.D.3 (Shared Responsibility and Cooperative Programs): EPA should consider adding language addressing the fact that any joint agreement to share implementation of a permit requirement through cooperative measures must be a legally binding document that clearly explains the division of work and backup plan in case one party does not follow through with their responsibility under the agreement.

8. Page 21/Part I.D.5.a(ii)(f) [Construction Site Stormwater Runoff Control]: NMED suggests that EPA add language to section (f) addressing site inspections. Unless there are clear requirements for the MS4 to visit construction sites in a timely fashion, the project could be nearly complete by the time the MS4 inspector makes it to the site. NMED suggests that EPA add language to require timely inspections to ensure that BMPs are properly selected and installed at the subject site. "Timely" could include considerations of citizen complaints, and rainfall amounts during the course of the project, as well as an encouragement to the Permittees to consider inspections as close to the beginning of the project as possible.

9. Page 25/Part I.D.5.b.(ii)(b): EPA should clarify the difference between Option A (a site specific 80^{th} or 90^{th} percentile storm event discharge volume) and Option B (a site specific pre-development hydrology and associated storm event discharge volume). What parameters are the permittees required to stay within if they choose to evaluate using Option B? If a permittee chooses to implement a 30^{th} percentile storm event, would that be acceptable? Later permit language states "For purposes of this permit, pre-development hydrology shall be met by capturing the 90^{th} percentile storm event runoff (consistent with any limitations on that capture) which under undeveloped natural conditions would be expected to infiltrate or evapotranspirate on site and result in little, if any, off-site runoff."

10. Page 25/Part I.D.5.b(ii)(c): What are the documentation requirements to show that all of the structural BMP implementation factors were considered?

11. Page 26/Part I.D.5.b(iv): The last sentence is unclear: "The permittee must develop a report of the assessment findings, which is to be used to provide information to the permittee, of the regulation changes necessary to remove impediments and allow implementation of these practices." Does EPA mean that the report will only be used internally and is not required to be submitted to EPA and NMED?

12. Page 33/Part I.D.5.c(iii)(c): The permittees should keep a list of the No Exposure Certifications for MSGP facilities within their jurisdictions in addition to the list of MSGP NOI IDs.

13. Page 36/Part I.D.5.d: EPA must correct the permit references in Table 8 – currently the references are to I.D.5.e but this section should be I.D.5.d.

14. Page 38/Part I.D.5.e: EPA must correct the permit references in Table 9 – currently the references are to I.D.5.f but this section should be I.D.5.e.

15. Page 38/Part I.D.5.e(ii): This reference should be corrected to: Part I.D.5.e (i).

16. Page 41/Part I.D.5.f: EPA must correct the permit references in Table 10 – currently the references are to I.D.5.g but this section should be I.D.5.f.

17. Page 42 and 43/Part I.D.5.g: EPA must correct the permit references throughout section (g) and in Table 11 to reflect (g) not (h).

18. NMED suggests that EPA add a statement to the first section of Part III indicating that the permittees must select whether they are monitoring individually or cooperatively with their NOI submission.

19. Page 1 of Part III/Part III.A.1: The proposed permit states that "monitoring shall be conducted at outfalls, internal sampling stations, and/or in-stream monitoring locations at water of the US that runs in each entity or entities' jurisdiction(s)." For clarity, NMED believes that EPA intends that each water of the US running through either each jurisdiction if the permittee is working individually, or each water of the US running through an area where permittees are working collaboratively must be monitored.

20. Overall sampling comment: NMED feels that 10 sampling events over the course of the five year permit is not enough. At this point, the program is only requiring monitoring for very basic constituents. 10 sampling events is not enough to statistically determine the effect that the stormwater discharge has on the environment. NMED encourages EPA to consider alternative language that stresses that 10 samples is a minimum and permittees are encouraged to sample more often.

21. Page 2 of Part III/Part III.A.1.c: The proposed permit states "Individual grab samples shall be preserved and delivered to the laboratory where samples will be combined into a single composite sample from each monitoring location." The intent of the MS4 program is to assess the impact of the discharge's effect on the receiving waterbody. If each grab sample is composited there is not a way to assess what the impact is from the upstream portion of the watershed to the downstream portion. Especially if samples are being taken throughout the watershed, it is useful to see how the quality changes in a linear fashion downstream. Compositing of samples just does not make sense in this context.

22. Page 2 of Part III/Part III.A.1.h: EPA may want to consider language to guide permittees in how to assess whether their discharges may be contributing to instream exceedances of WQS.

23. Page 2 of Part III/Part III.A.2.d: Again, NMED does not feel that combining samples from different monitoring locations into one composite sample will give useful information to figure out where contamination is coming from. Samples from discrete monitoring locations should be kept separate and analyzed separately. If a permittee is taking four (4) grab samples at one location, spaced 15 minutes apart, those can be combined. EPA may want to modify the language as suggested below to ensure clarity (additions in *italics)*:
    a. Grab samples *discrete to each location* will be combined into a single composite sample from each station, preserved and delivered to the laboratory for analysis. *Samples from different monitoring locations should not be composited together.*

24. Page 4 of Part III/Part III.A.3: The sentence "Floatable material shall be monitored at least twice per year at priority locations and at a minimum of two (2) stations" needs more clarity. What is the difference between priority locations and regular stations? Can they be the same station? Do the permittees need to monitor just a minimum of two stations?

25. Page 4 of Part III/Part III.A.3: A cooperative floatable monitoring program is acceptable, but this section needs more specificity. How many stations does a cooperative program need to monitor? How do they determine what locations they pick?

26. Page 4 of Part III/Part III.A.4.a (i)(b): Sampling Duration – This appears to be an incomplete sentence – "Where the discharge lasts less than three hours, the permittee should report the value..."

27. Page 4 of Part III/Part III.A.4.b: NMED still recommends keeping the paragraphs referring to screening level tests and PCB methods.

28. Page 6 of Part III/Part III.D.1: Language will need revision here to comply with Sufficiently Sensitive. NMED suggests (changes in *italics*):
    a. Monitoring results (Part III.A.1, Part III.A.3, Part III.A.5.a) obtained during the reporting period running from July 1st to June 30th shall be submitted on discharge monitoring report (DMR) forms along with the annual report required by Part III.B. A separate DMR form is required for each monitoring period (season) specified in Part III.A.1. ~~If any individual analytical TEST RESULT IS LESS THAN THE minimum quantification level (MQL) listed for that parameter, then a value of zero (0) may be used for that test result for the discharge monitoring report (DMR) calculations and reporting requirements.~~ *For applications and effluent characteristics reports, both the minimum detection limit (MDL), if calculated, and minimum limit (ML) shall be submitted. Results below MDL may be reported as zero. For pollutants indicated below, results at or above MDL, but below ML shall be reported as detected and estimated. For all other pollutants, results below ML may be reported as less than (<) quantified value.*

b. *Current EPA Region 6 minimum quantification levels (MQLs) for reporting and compliance are provided in Appendix F of this permit. The following pollutants may not have EPA-approved methods with a published ML at or below the effluent limit, if specified:*

POLLUTANT	***CAS Number***	***STORET Code***
Total Residual Chlorine	*7782-50-5*	*50060*
Cadmium	*7440-43-9*	*01027*
Silver	*7440-22-4*	*01077*
Thallium	*7440-28-0*	*01059*
Cyanide	*57-12-5*	*78248*
Dioxin (2,3,7,8-TCDD)	*1764-01-6*	*34675*
4,6-Dinitro-O-Cresol	*534-52-1*	*34657*
Pentachlorophenol	*87-86-5*	*39032*
Benzidine	*92-87-5*	*39120*
Chrysene	*218-01-9*	*34320*
Hexachlorobenzene	*118-74-1*	*39700*
N-Nitrosodimethylamine	*62-75-9*	*34438*
Aldrin	*309-00-2*	*39330*
Chlordane	*57-74-9*	*39350*
Dieldrin	*60-57-1*	*39380*
Heptachlor	*76-44-8*	*39410*
Heptachlor epoxide	*1024-57-3*	*39420*
Toxaphene	*8001-35-2*	*39400*

29. Page 4 of Part IV/Part VI.Q: The language here will need updating in accordance with the Sufficiently Sensitive Rule.

30. Appendix A, Farmington UA: The potential permittees list in the Farmington Urbanized Area should also include the Town of Kirtland. The mayor is Mark Duncan, and a board of trustees was also elected in May 2015. The town started operation in July 2015. Other CDPs that should be added are Fruitland.

31. Appendix A, Los Lunas UA: The correct New Mexico Department of Transportation District Office for this area is District 3 (Albuquerque), not District 1 (Las Cruces).

32. Appendix B, Farmington WLA (San Juan E. coli and SBD, La Plata E. coli and SBD): The tables should be modified as follows to incorporate Condition #2 above.
Table 1. Waste Load Allocations to regulated MS4s discharging in the San Juan Basin.

Assessment	**Stream**	**Permittee**	**Flow Conditions & Associated WLA**

Unit/Segment ID	Name	Class	Pollutant	Critical Low Flow	WLA (cfu/day)	WLA (lbs/day)	WLA (j/m^2/s)
2403.A_00 Segment 20.6.4.402 NMAC	Animas River (San Juan River to Estes Arroyo) (based on flow at USGS Stations 09364500, 09364010, 09363500)	Class B	E. coli	4Q3	$1.6x10^{10}$		
		Class B	Temperature	4Q3			8.93
		Class B	Total Nitrogen	4Q3		3.25	
		Class B	Total Phosphorus	4Q3		1.01	
NM-2404_00 Segment 20.6.4.404 NMAC	Animas River (Estes Arroyo to Southern Ute Indian Tribe bnd) (based on flow at USGS stations 09364500, 09364010, 09363500)	Class B	E. coli	4Q3	$4.8x10^{9}$		
		Class B	Total Phosphorus	4Q3		0.8	
NM-2402.A_00 Segment 20.6.4.402 NMAC	La Plata River (San Juan River to McDermott Arroyo)	Class B	Sedimentation	4Q3	Not to exceed 20% fine sediment.		
		Class B	E. coli	4Q3	$1.52x10^{6}$		
NM-2401_00 Segment 20.6.4.408 NMAC	San Juan River (Animas River to Cañon Largo)	Class B	Sedimentation	4Q3	Not to exceed 20% fine sediment.		
		Class B	E. coli	4Q3	$1.75x10^{10}$		
NM-2401_10 Segment 20.6.4.401	San Juan River (Navajo boundary	Class B	E. coli	4Q3	$5.85x10^{10}$		

NMAC	at Hogback to Animas River)						

And, an additional table should be added as shown below for the Middle Rio Grande basin:

Table 3. Waste Load Allocations to regulated MS4s discharging in the Middle Rio Grande basin.

Assessment Unit/Segment ID	**Stream Name**	**Permittee Class**	**Flow Conditions & Associated WLA**				
			Pollutant	**Critical Low Flow**	**WLA – high (cfu/day)**	**WLA - moist (lbs/day)**	**WLA – dry (lbs/day)**
NM-2105_40 Segment 20.6.4.105 NMAC	Rio Grande (Rio Puerco to Isleta Pueblo bnd)	Class C	E. coli	4Q3	$9.86x10^{11}$	$2.72x10^{11}$	$1.75x10^{10}$

33. Appendix B, TMDL constituents are E. coli and total phosphorus, not total phosphate, in the Animas River (Estes Arroyo to Southern Ute Indian Tribe Boundary).

34. Please update the language regarding alternative sub-measureable goals in accordance with Condition #2 above.

35. Appendix F: NMED recommends adding the following table to show that certain MQLs will not be sensitive enough to ascertain whether a discharge is causing or contributing to an in-stream water quality standard exceedance.
    a. *Current EPA Region 6 minimum quantification levels (MQLs) for reporting and compliance are provided in Appendix F of this permit. The following pollutants may not have EPA-approved methods with a published ML at or below the effluent limit, if specified:*

POLLUTANT	***CAS Number***	***STORET Code***
Total Residual Chlorine	*7782-50-5*	*50060*
Cadmium	*7440-43-9*	*01027*
Silver	*7440-22-4*	*01077*
Thallium	*7440-28-0*	*01059*
Cyanide	*57-12-5*	*78248*
Dioxin (2,3,7,8-TCDD)	*1764-01-6*	*34675*
4,6-Dinitro-O-Cresol	*534-52-1*	*34657*
Pentachlorophenol	*87-86-5*	*39032*

Benzidine	*92-87-5*	*39120*
Chrysene	*218-01-9*	*34320*
Hexachlorobenzene	*118-74-1*	*39700*
N-Nitrosodimethylamine	*62-75-9*	*34438*
Aldrin	*309-00-2*	*39330*
Chlordane	*57-74-9*	*39350*
Dieldrin	*60-57-1*	*39380*
Heptachlor	*76-44-8*	*39410*
Heptachlor epoxide	*1024-57-3*	*39420*
Toxaphene	*8001-35-2*	*39400*

36. Appendix G:
    a. NMED recommends that EPA add a note to this appendix indicating that this list is based on the most recent (2014-2016) 303(d)/305(b) list.
    b. There are no impairments currently listed for Cienega Creek in the Santa Fe UA – EPA may want to consider deleting this waterbody from this particular table.

Appendix A:

Thermograph Data at Berg Park